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Creating a Non-Punitive System That Works

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When an adverse event occurs, the current EMS culture often results in a response where agencies seek to place blame and close the case by disciplining an individual. This response follows what is called the 'blame and shame' mentality and is known to be ineffective in improving quality of care and patient safety for several reasons. First, it ignores the fact that other factors in the system (besides the individual provider) might have contributed to, facilitated, or even caused the adverse event. This is important, because if these factors can be identified and modified, the chance of future similar events can be reduced. Second, focusing blame on the individual doesn't prevent the same event from happening to another individual in the future. Third, the "blame and shame" mentality creates a culture where EMS providers fear reprisal and as a result may try to hide adverse events and near misses rather than reporting the events to help improve the system. Unless EMS management, system leaders, and medical directors are aware of such events, they cannot take steps towards reducing them.

Other high-risk industries, such as aviation and nuclear power, have become highly reliable and safe largely because they have moved away from this type of mentality. Instead, they use the *systems approach* to maximize safety. The systems approach recognizes that all adverse events have multiple contributing factors, many of which are out of control of the individual. It is important that agency-level quality improvement (QI) systems include a structure to review all aspects of near misses and adverse events so that some of these systems contributions can be identified. Once identified, steps can be made to change the latent hazard, and avoid repeats of the same

event. For example, if a provider gave the wrong medication and the review revealed that part of the problem was that the vials looked similar and were kept next to each other in the drug box, then different vials could be obtained and/or they could be stored in different areas.

Aviation is often-cited as an ideal model for safety which could benefit other high-risk complex industries including EMS. When safety events are investigated, aviation focuses on system problems, not human error. They follow the principle that human error cannot be eliminated, since it is merely an inevitable part of life. So the only way to improve the safety and reliability of any system is to introduce system protections. For example, it is possible for an EMT to press the "power-off" button on an AED when they intend to push the "shock" button. This could be detrimental to the patient (due to the delay in shock), so the device design should prevent the possibility of powering down by the simple single push of a button. For example, it could display an "are you sure" message rather than immediately powering down, just as a modern computer slide projector does.

It is clearly counterproductive for a QI system to be perceived as a punitive, "big brother is watching" program. Instead, the goal should be for the program to be a peer-review system, which allows providers, through peer feedback, to adapt to each other's best practices, and to recognize opportunities to improve our practice and to make improvements to the system that will prevent future similar events. However, EMS providers will approach QA in this fashion only when they feel protected in the system. A QI committee should involve peer reviewers, key leadership, and the medical director. It is better that the QI system not be

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lead by supervisors with evaluation and hire/fire power, because this immediately defeats the purpose of a non-threatening, peer review environment.

In order for this system to work we ask our EMS providers to approach (and receive) QI activity with an open mind. As this is rolled out the providers should give the system a chance to show them that QI can be a positive, educational, and a normal part of the medical profession. Every other medical field, from nurses to physicians to dentists, embrace QI as an important component of continuing education. EMS can do the same, but it takes buy-in from senior leadership to the street provider. This involves all administrative and operational personnel, including the Board of Directors, operations leadership, fire chief, and medical director.

Critics might feel that the *systems approach* creates a blame free culture, and that it is in conflict with the need to hold individuals accountable for appropriate training, preparation, and behavior. Although safety engineers point out the importance of a relatively blame-free culture, it is also clear that in rare cases EMS providers choose to engage in reckless behavior that puts patients at risk, and we must have a mechanism to address this. Some EMS regions have adapted a strategy called *just culture*, which was developed by safety scientists James Reason and David Marx (see table).

Normal Error (Human Error)	At-Risk Behavior	Reckless Behavior
Inadvertent action: slip, lapse or mistake <u>Manage through changes in:</u> • Processes • Procedures • Training • Design • Environment	A choice: Risk not recognized or believed justified <u>Manage through:</u> • Removing incentives for At-Risk Behaviors • Creating Incentives for healthy behaviors • Increasing situational awareness	Conscious disregard of unreasonable risk <u>Manage through:</u> • Remedial Action • Punitive Action
SUPPORT	COACH	SANCTION

Adapted from: David Marx, Just Culture. Outcome Engineering 208, www.JustCulture.org

After a thorough review of the event, the provider's involvement can be classified into one of the three following behaviors (see figure below): normal error, at risk behavior, or reckless behavior. The latter category is considered unacceptable and, if a proper "systems approach" is undertaken in reviews, will be very rare. The other two types of events are treated in a non-punitive, educational, and protected manner. If a normal error has occurred, then the provider undoubtedly feels badly and should be supported, and latent hazards discovered in the review should be changed in ways such as system design. At risk behavior should be "coached," meaning peer reviewers or agency leadership reminds the provider that their practice might lead to an adverse event. It should also be recognized that often people take this route because the environment makes it easier, or the path of least resistance. For example, in the current infection control

environment, it would be considered at-risk behavior if a provider failed to wash hands between patients, possibly putting the next patient at risk for pathogens such as MRSA. However, if no hand-washing stations are available to the EMS provider between calls, then the system is steering a well-meaning provider towards at-risk behavior. Fixing the system factor will likely change the provider behavior. Finally, it is worth noting that when a true culture of safety has been attained within an EMS agency, then coaching of at-risk behavior will occur between individuals, independent of the QA system. For example, if a BLS provider noticed that their paramedic partner skipped washing hands after a call, they would feel comfortable reminding them.

EMS agencies and medical directors should consider formally adopting this model, as it serves as a structure to classify events and guide the response. How does an agency put this philosophy into practice? When reviewing an adverse event, near miss or other issue raised in the QA system, ask "why" six times to discover some of the more subtle contributing factors. Develop an expectation that reviewers document at least three system factors (i.e. not human error) that contributed to the event, or created a set-up for error. Then look at each one of these individually to determine ways to improve the system. Actively classify the human component of the event into one of the three just culture categories, and strictly adhere to the type of agency response that is appropriate to each category.

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